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THE NAVY'S CHANGING FORCE PARADIGM

Robert C. Rubel

he recently issued *Cooperative Strategy for 21st Century Seapower* reflects an institutional response to America's changed strategic circumstances and embodies a logic that suggests a significant change to the Navy's force structure paradigm. However, because the document is broadly worded, the service still has a lot of work to do to achieve an internal consensus on the implications of this logic for its future force structure. There is considerable intellectual "churn" associated with this shift, and the Navy has yet to come fully to grips with its implications for force structure. This article will attempt to describe the broad outlines of the paradigm shift and assess some of the programmatic implications, including the need for additional numbers of general-purpose surface combatants.

A naval force paradigm is a theory of how various types of ships and weapons available to a navy should be organized for warfare. The paradigm is governed by the characteristics of the principal naval weapons of the day and by the maritime strategy a nation pursues. In this nation's early days, the principal weapon was the naval cannon, which could hurl a twenty-four-pound shot about half a mile with effectiveness. The strategy of early administrations not to be drawn into European wars, coupled with their determination to protect American merchant shipping, produced a force paradigm of a small fleet of highly capable frigates, operating independently or in small squadrons. At the dawn of the twentieth century, as the United States elected to widen its strategic perspective and become a player on the world stage, its force paradigm shifted to a battleship-centric fleet, reflecting the governing weapon of the day, the large-caliber naval gun.

With the advent of the airplane and the impetus of the Japanese attack on Pearl Harbor, the battle-line paradigm shifted to one of circular formations centered on fast aircraft carriers. In all of these paradigms there was a central ship type that supported the principal weapon. Other ship types supported the central type or performed such collateral, systemic duties as convoy escort, amphibious operations, or minesweeping. As the Navy built budgets for submission to Congress, each type of ship, as well as its characteristics and numbers, could be justified based on its role in the existing force paradigm.

Of late, the Navy has come under fire from Congress and various pundits and think tanks for its inability to provide adequate justification for the proposed "DDG-1000" advanced destroyer, as well as for its decision to cut production of that type to three ships. Much blame is laid at the feet of current Navy leadership, especially as this issue is regarded as symptomatic of a larger problem with the service's shipbuilding plans. The call for a 313-ship navy by the Chief of Naval Operations (CNO), Admiral Gary Roughead, is regarded in some quarters as unaffordable and in others as based upon a number, be it too high or too low, that is supported by insufficient analysis. Part of the Navy's current difficulty with programmatics may indeed be institutional and procedural, consisting, in various degrees, of failures in concept development, cost estimation, and program management. However, the perceived credibility problem also stems from the fact that the Navy is in the initial stages of a fundamental naval force paradigm shift, one with implications for force structure that are not unlike the shift from a battleship-centric force to an aircraft carrier-centric force. Today, the increasing effectiveness of antiship missiles, along with the increasing lethality of antiaircraft defenses, is about to make necessary a shift from a force centered on "big deck" aviation platforms to one that is more distributed and oriented around missile-firing platforms—most prominently, submarines and surface combatants. In the process, the Navy will shift from a force paradigm it adopted in 1942 and has employed in a refined version since the end of the Cold War.

THE "... FROM THE SEA" ERA

In September 1992 the Navy issued "... From the Sea," a white paper that responded to the radical alteration in global strategic conditions caused by the collapse of the Soviet Union. With its only competition on the high seas gone, the U.S. Navy faced the prospect of losing its justification for being. As Samuel Huntington pointed out in 1954, a military service requires a viable strategic concept in order to generate the public support needed to secure funding for it. "... From the Sea" represented that new concept: the Navy and Marine Corps would focus on projecting power ashore in support of joint operations. In a post–Soviet navy era, the United States was left as sovereign of the seas,

and its navy, as the white paper asserted, "can afford to deemphasize some efforts in some naval warfare areas."4

The area that was deemphasized was sea control. Gradually, over the course of the next fifteen years, the Navy structured itself in alignment with the logic embedded in "... From the Sea" and its two successors. However, this realignment was rather easy, as the forces in existence at that time, especially the Navy's aircraft carrier and amphibious forces, were, by and large, suitable for the execution of joint warfare in an uncontested littoral. The force drawdown of the 1990s consisted mostly of disposing of various classes of sea control-focused surface combatants; the force settled upon a set of carrier strike groups (CSGs) and expeditionary strike groups (ESGs), oriented around big-deck aviation platforms. The transition was made all the easier because the Navy's dominant community at the time, carrier-based aviation, remained at the center of the new paradigm.

During the succeeding fifteen years, nearly to the present, the Navy could concentrate geographically as well as functionally. Deployments gradually narrowed to two focal areas, the Persian Gulf and Northeast Asia, where "rogue states" might commit conventional aggression against U.S. allies. The lack of serious naval threat and the emergence of precision-strike munitions in time allowed the Navy and Marine Corps to establish the idea of a "sea base" (a concept that has since been raised to a quasi-paradigm status), whereby American operations ashore in hostile or undeveloped areas would be supported from the sea, without the need for much infrastructure on land. Perhaps the apotheosis of this concept was Operation ENDURING FREEDOM, whose initial phase was supported almost entirely by a naval task force some seven hundred miles from the landlocked scene of operations in Afghanistan. Starting in the late 1990s, advocates of network-centric warfare (NCW) added momentum to the Navy's littoral focus by claims that dispersed, networked forces could generate higher levels of combat effectiveness with smaller, cheaper platforms. Vice Admiral Arthur K. Cebrowski, a key oracle of NCW, promoted "Streetfighter," a small, fast, networked ship that eventually emerged as the Littoral Combat Ship (LCS). This was only part of the transformation. DDG-1000, starting life conceptually as an "arsenal ship," was to be a survivable platform, mounting a high-tech gun, that would provide significant naval gunfire support to forces deep inland. As "The Navy Operational Concept: Forward . . . From the Sea" said in 1997: "We will be able to deliver a large volume of firepower through new ways of achieving very high aircraft sortie rates and new weapons and platforms for delivering joint fires."6

However, even as the Navy adopted this new force paradigm and aligned itself institutionally to focus on joint warfare in the littorals, factors were emerging—technological, economic, and political—that would eventually force it to reconsider. Among the factors most relevant for the present discussion were the progressive development and proliferation of ballistic-missile technology, potentially including antiship capability; the ability of American cruisers and destroyers to conduct midcourse intercept of some kinds of ballistic missiles; the emergence of China as an economic power and its construction of a capable navy; the terrorist attacks of 9/11 and their downstream effects; and the resurgence of an economically viable and potentially hostile Russia. As these factors progressively manifested themselves, Navy admirals became increasingly uncomfortable with their service's institutional vector. This discomfort culminated in 2006 with then-CNO Michael Mullen's call for the development of a new maritime strategy. When it appeared in October 2007, the new strategy, while perhaps overly terse and virtually silent on the particulars of force design, contained a new logic that ran counter to the force paradigm set by the "... From the Sea" series of white papers.

The new strategy calls for "combat credible" forces (to be concentrated in Northeast Asia and the Persian Gulf regions), "globally distributed, mission-tailored forces," and a global maritime-security network—all welded together to prevent or limit regional conflict, render disaster relief, and provide other services necessary to foster and defend commerce and security. Viewed in the context of emerging blue-water navies, terrorists bent on smuggling weapons of mass destruction into the United States and allied nations, increasing exploitation of ocean resources, and interregional ballistic-missile threats, this new strategy strongly suggests a navy very unlike the one that has emerged since the Cold War.

A NEW FORCE PARADIGM

It is, therefore, as a result of a changed strategic environment and a new but broadly worded strategy that the Navy is now attempting to accommodate a fundamental force-paradigm shift. In the past, years and much experimentation with ship types have been required to make the transition. There have been blind alleys. Whether battle cruisers or small aircraft carriers, these blind alleys were functions of conceptual uncertainty as to what the new governing weapon would be. That same uncertainty exists today; the Navy is struggling to find ways to make its current force more secure against missile and submarine attacks while at the same time its analyses are finding that a different approach may be necessary. In order to make sense of what is occurring and to develop a level of institutional confidence in its new direction, the Navy has reinstituted "Title X" war gaming, an arena it abandoned in 2001, and has developed a new strategic planning process meant to provide guidance to programmatic processes.⁷

As has been the case for the past 120-plus years, the service has turned to its war college to help think through the problem. Studies conducted at the Naval

War College in Newport, Rhode Island, over the past few years have concluded that the combination of emergent weapons technology, political realignments, and economic trends points to a fleet that should possess different characteristics from the one in the water today—different even from some planned designs, like DDG-1000. These studies suggest that Navy forces should adopt a different style of war fighting, one that is more dispersed and flowing, not oriented to defensive bastions around sea bases of CSGs or ESGs. Moreover, the access-denial problem is fundamentally different in the Persian Gulf from what it is in Northeast Asia, suggesting that the Navy should tailor its force by region and mission area. Further, studies suggest, the Navy does not necessarily need to design every ship for integration into a battle group. These findings are based, in some cases, on more than five years of continuous, iterative, and highly detailed war gaming, but even so they are still preliminary and must be subjected to additional gaming and analysis.

One kind of force paradigm that can be inferred from the results of these studies is a navy that consists of four principal segments. The first segment, an "access generation" force, would focus on employing missiles. The targets for these missiles would principally be opposing access-denial forces, whether ships, submarines, aircraft, or ballistic-missile sites on the shore. Given the difficulty of defending against modern missiles, this force would adopt a highly dispersed and covert posture in order to prevent the enemy from targeting it and to maintain combat credibility even in the most difficult crisis and brink-of-war situations. The exact constitution and operational doctrine of this force would be different in Northeast Asia from what it would in the Persian Gulf, due to the fundamentally different natures of the opposing forces and the maritime terrains. Generally speaking, this force would be centered on submarines, especially the converted Ohio-class SSGNs (formerly SSBNs) and surface ships such as the Arleigh Burke (DDG 51) class of guided-missile destroyers and the Littoral Combat Ship. The key will be generating targeting data for the missiles these platforms carry, but that is a better combat problem to have to solve than the defense of a carrier battle group.

Currently, the Navy relies on carrier-based strike fighter aircraft to perform the bulk of its sea-control and power-projection missions. The Chinese and others understand this and are working on ways to neutralize U.S. carriers and their embarked tactical aviation. To date, the Navy's response has been to focus on developing better defenses for carriers against submarines and cruise missiles. Such an approach, while logical and understandable, has always been problematic. History has shown that tactical defense is the most disadvantageous type of sea fight. If the Chinese are able to perfect an antiship ballistic missile, the problem could get worse. One solution is to disperse striking power among greater

numbers of platforms that are hard to find and hit. The SSGN, with its ability to house 155 strike missiles, is a promising candidate. A strategy employing a "grid" populated with DDGs, submarines, and LCSs and using advanced missiles for both sea control and land attack might negate and neutralize investments in carrier-killing systems. Such an approach would make an overall naval operation more robust, as there would be no key ship type, the loss of one or two of which would unhinge the overall operation. Such an approach would also increase opportunities for deception, instilling doubt in the minds of potential opponents. This would be especially valuable in crisis situations. Concentrated and vulnerable naval forces can quickly turn into political liabilities, removing instead of adding to options. A hard-to-target force packing lethal missiles would be much more likely to provide the necessary deterrence and influence.

The second force segment would be the "power projection" force, which would look much like what the Navy has today: CSGs and ESGs centered on big-deck aviation ships. However, instead of being the ubiquitous arbiter of naval power they are today, they would become a specialized role-playing force, not unlike the U.S. Seventh Fleet in World War II, which in effect constituted General Douglas MacArthur's "sea base" in his campaign up the Solomons and New Guinea toward the Philippines. That force was capable of anything but confronting the main Japanese fleet. The new power-projection force would generally operate in permissive environments but could support the access-generation force in certain instances.

The third force segment would be the "maritime security" force. Frequently supported by elements of the first two segments, this force would have specialized units conduct patrols for terrorists and criminals and help to catalyze a global maritime security partnership through extensive engagement. Other units, such as hospital ships, high-speed vessels, and others, would conduct systematic operations to establish a stable political and economic environment throughout the oceans and in the littorals. A recent Global War Game at the Naval War College that involved international naval officers as players revealed that our potential partner navies, especially those in Africa, regard any kind of grey-hulled ship as threatening. Therefore, new (and cheaper) types of vessels should be considered for global maritime partnership missions. Another insight gained from that game was that a broad cross section of international navies consider their principal mission to be law enforcement. This might seem a U.S. Coast Guard function, but because of severe limitations on the Coast Guard's size and because these partner services are navies as such, with defense missions in addition to law enforcement responsibilities, the U.S. Navy will have to find ways to engage in this arena. Therefore, this force segment is as much characterized by the sailors who man it as by the nature of its platforms.

The fourth force segment would be the series of maritime operations centers (MOCs) that is now being established around the world. These centers represent a force element in themselves, not simply command-and-control "overhead" for afloat forces; they will carry out various kinds of information operations that are critical to maritime security, power projection, and the screening of access-generation forces. In today's networked and media-saturated world, information is a weapon, much more than it was in the past. Obtaining and denying information are central operational capabilities, as is the ability to process and assess the meaning and significance of the avalanche of information available to naval forces. It is no longer sufficient for naval staffs to generate plans and issue orders; they must function as information clearinghouses and as operational units in their own rights. As an indication of this changing warfare environment, the Navy is contemplating embedding task force commanders within the MOC and standardizing its task force structure on a global basis to make networked and interconnected staff operations more coherent. Another indication is the establishment of a maritime staff operators' course to train the personnel who will operate the MOCs.

CALCULATING FORCE SIZE

Traditionally, the overall size of the Navy has been determined principally by calculating the forces needed to fight the major theater wars that could most likely occur (Iraq, Iran, Korea, etc.), with some additional forces for "presence." Multipliers for maintenance and training cycles were added to arrive at the total force. However, this force is focused on the Middle East and East Asia. Its ability to generate engagement, humanitarian assistance, and disaster relief as well as ballistic-missile defense in other areas is marginal. However, the new maritime strategy is supposed to provide for the defense of global commerce and security on a continuous basis. Therefore, force-size calculations must now shift to a different basis. Some writers have discussed "high/low" mixes and different "modes." Under the new force paradigm, some traditional ship types, such as amphibious ships and aircraft carriers, will be employed at various times in operations undertaken by the access-generation and maritime-security elements. Thus it is neither accurate nor useful to talk about high- and low-end operations. The real question in terms of programmatics under the new paradigm will be how much capacity is needed in each element of the force. To use an old paradigm as an easy example, the Navy would not have wanted to overspend on battleships if it was to be able to buy enough cruisers and destroyers necessary for screening the battleships, let alone the logistic forces necessary for the fleet's successful forward operation. Moreover, there would have been a point of diminishing returns at which the incremental naval power generated by the next new battleship would not be worth its marginal cost. In this new paradigm, a careful calculation must be made of how much access-generation, power-projection, missile-defense, engagement, and disaster-relief capacity is needed worldwide. Clearly, the traditional major combat scenarios (major combat operations, or MCOs) will figure in the calculation of access-generation forces, but the Navy will have to establish a defendable criterion for force sizing outside this framework if the new force paradigm is to be achieved.

The new maritime strategy contains potentially useful logic for capacity calculations, even if that logic is as much implicit as articulated. The fundamental premise is that defense of the global system under current strategic conditions depends more than ever on the collective and cooperative action of nations and their navies. In order to catalyze and capitalize on this cooperation, the Navy must have at its disposal certain capabilities—such as ballistic-missile defense, disaster relief, and partner capacity building—in all regions of the world. Each region's exact requirements would be a bit different from those of the others, but the steady-state peacetime defense scenario in each would be treated like an MCO for force planning purposes. If we assume that a transformed access-generation force will require fewer power-projection capabilities for MCO purposes, trade-offs can be made that would shape the force without much, if any, total growth in the overall tonnage, or at least overall cost, of the U.S. Navy.

To some this may sound like the Navy would be blunting its sword, but in an age of antiship missiles and advanced surface-to-air missiles, its current principal ship type, the *Nimitz*-class aircraft carrier, and its principal weapon, the tactical strike fighter, may not constitute as sharp an edge as they used to. The cost of keeping this ship type viable as an access-generation tool is probably all out of proportion to investments by others in threatening it. Recognizing the shift to the missile age is as difficult today for some officers as many officers in the 1930s found it to recognize that the airplane had superseded the large-caliber gun. But the last thing the Navy or the nation needs is a naval defeat like Pearl Harbor or the sinking of HMS *Repulse* and *Prince of Wales* in 1941 to bring home the lesson that times have changed.

THE CENTRALITY OF DDG 51

One potential connecting link among the elements of the new force paradigm is the guided-missile destroyer. There are a number of reasons why the future Navy should be populated with a relatively large number of these warships. First, neutralizing ballistic missiles, whether they are aimed at shore or sea targets, is a critical function worldwide. This notion is supported by increasing Navy component commanders' calls for the stationing of ships with this capability in areas outside normal naval-presence hubs. Since sea-based ballistic-missile defense is

a proven capability, the Navy should procure enough ships that can do it, not only to defend and support CSGs and ESGs but also to establish a viable ballistic-missile defense posture in virtually every region of the world. The key is to have enough of them to provide theater commanders flexibility in responding to emergent situations, including timeliness of response. For various tactical and technical reasons, they should operate in this role in pairs. *Arleigh Burke* guided-missile destroyers are also useful for signaling and other forms of naval diplomacy, as recently illustrated by the dispatch of USS *McFaul* (DDG 74) to deliver humanitarian supplies to Georgia. The logic of the move, as delineated by a Stratfor.com analyst, reveals the utility of the ship type:

It is interesting, therefore, that a U.S. warship delivered humanitarian supplies to the Georgians. The ship did not use the port of Poti, which the Russians have effectively blocked, but Batumi, to the south. That the ship was a destroyer is important. It demonstrates that the Americans have a force available that is inherently superior to anything the Russians have: the U.S. Navy. A Navy deployment in the Black Sea could well be an effective counter, threatening Russian sea lanes.

While it was a warship, however, it was only a destroyer—so it is a gesture, but not a threat.⁸

One of the key aspects of U.S. maritime strategy since the end of the Second World War has been the maintenance of naval forces forward, so as to keep them available to support American interests quickly. Timeliness of response has been a factor in a number of situations, ranging from the invasion of South Korea by the North in 1950 to the arrival of aircraft carriers in the Red Sea and the northern Arabian Sea in response to the Iraqi invasion of Kuwait in 1990. Significant lag times in arrival of naval forces can lead potential aggressors to think in terms of a "window of opportunity." There is evidence that in 1982 the Argentine junta made its final decision for invasion of the Falklands on the basis of a report that the British nuclear submarine HMS Conqueror had just been dispatched from the Mediterranean to the South Atlantic. Once it arrived, the junta felt, nothing would be possible; therefore, it calculated, the interval between the ship's departure and its estimated arrival on the scene represented a window of opportunity, one that could not be wasted. 10 This logic suggests that U.S. naval forces be positioned such that no potential aggressor can perceive an operationally useful interim before they can be on station. This kind of responsiveness defines the necessary capacity—that is, the numbers of ships—the Navy should possess. Given the ship-by-ship superiority of U.S. Navy forces over their potential opponents, be they sea or shore based, the United States does not need to dispatch a fleet or battle group; in many cases a small, tailored squadron, even a single DDG 51, would suffice.

In today's world, inherently peaceful operations like humanitarian assistance may be threatened by cruise missiles. The fact that Hezbollah was able to surprise and hit an Israeli patrol boat with an Iranian-provided C802 coastal-defense cruise missile should be a warning flare to all nations with navies that such weapons can be obtained by nonstate actors and secretly positioned almost anywhere. Thus, nonmilitary or auxiliary ships sent for peace operations may require missile-defense escorts, at least until the security of the operations area can be assured.

Assuming that the capabilities of DDGs would be useful enough in every region for theater commanders to want at least two continuously available, and also that most cruisers would be assigned to group defense, a minimum of seventy-five DDGs would be needed for battle-group support, ballisticmissile defense, and independent missions. The Navy has programmed sixty-two; a force growth of thirteen would be feasible. However, the total number needed may grow even more if the Navy adopts the new force paradigm outlined above in order to overcome the increasingly formidable antiaccess force the Chinese are building.

The general tone of thinking laid out in this article has, in part, I believe, caused senior Navy officers to revise their positions on DDG-1000 and the DDG 51 class. This sea change in the Navy indicates the early stages of a paradigm shift away from a force centered on big-deck aviation platforms. Although assault ships (LHDs) and nuclear-powered aircraft carriers (CVNs) will continue to constitute a critical power-projection capability for the United States into the foreseeable future, the Navy will increasingly shift to dispersed but integrated surface and subsurface operations to constitute the credible combat power required by its new maritime strategy.

CNO has justified DDG-1000 as a technology demonstrator, and this corresponds well with the decision to build only three of them. Despite the current advantages of Arleigh Burke in system configuration and cost, and its projected utility, it is still a gas-turbine-powered destroyer that employs chemical-based weapons. As the technologies of rail guns, electromagnetic-discharge defenses, and electric drive develop, there will come a time when a new class of vessel is needed to take full advantage of them. DDG-1000s will provide the Navy and defense industry with valuable education in how to take some of these technologies to sea. In the meantime, the Burke class and the LCS will help make the paradigm shift for the U.S. Navy.

FIGHTING FOR INFORMATION

The new naval force paradigm will also feature a doctrine of fighting first for information. Not only must it be able to overcome opposition to get information (that is, to conduct "opposed ISR"),* but it must be able to fight to deny information to the enemy. Future sea fights for information will not be localized (the Chinese doctrine of "localized and limited wars under informatized conditions" holds that although the direct combat space of wars will be limited, the "related war space" will be expanded), and they will begin well before any overt outbreak of traditional hostilities. 11 The protective covertness that surface fleets have traditionally enjoyed is being threatened by new combinational arrays of ISR technologies including satellites, unmanned systems, over-the-horizon radars, the Internet, etc. The reach of these systems and networks will be global, so the information fight will be global, even if the "kinetic arena" is geographically constrained. An indicator that the Navy is starting to understand this can be seen in its initiative, mentioned above, to establish a network of interconnected maritime operations centers that will be capable of coordinating the information fight on a global scale. Under the new force paradigm, the MOCs will be a "screen" for naval forces. Given the immense advantages in range and endurance of unmanned aerial vehicles (UAVs), it is quite possible that aircraft carriers also will be part of the protective screen for distributed surface and subsurface forces, launching from safe distances arrays of UAVs that will scout, relay, deceive, and even strike to help the subsurface and surface grid deliver its killing missile power.

The information fight will affect all three elements of the new naval force. Beyond its effects on the access-generation force as just discussed, the information fight is central to global maritime security. Maritime forces around the globe, from all nations, must have information on what and who is out there—on, over, and under the seas—in order to prevent terrorism, drug running, human trafficking, and poaching. Although current efforts are encountering political obstacles, eventually a global maritime picture will emerge. Here again, the centrality of the Navy maritime operations centers becomes evident as they become clearinghouses for maritime situational awareness. When functioning as staffs for joint force maritime component commanders, the MOCs will play a key role in the information fight associated with joint power projection. Thus the MOC represents a distinct element in the new naval force paradigm.

The new force paradigm described here is not a technological fantasy. It is most fundamentally a conceptual shift, one that will be useful in steering experimentation and investment along more affordable, and ultimately more useful, lines. We have in place a maritime strategy that can be used to establish a defensible basis for force-capacity calculations. The Navy has at its disposal, as it did in

^{*} ISR: intelligence, surveillance, and reconnaissance.

1992, forces that can be readily adapted to the new paradigm, and it has already begun changing its command-and-control structure to accommodate the full range of operations called for in the new strategy. What remains is for the Navy to make the intellectual and emotional shifts to the new force paradigm.

NOTES

- 1. Reprinted in *Naval War College Review* 61, no. 1 (Winter 2008), pp. 7–19; also available at www.navy.mil/maritime/MaritimeStrategy.pdf.
- 2. U.S. Navy Dept., "... From the Sea: Preparing the Naval Service for the 21st Century." For the publishing history of this white paper and the various sources posting or reprinting it, see John B. Hattendorf, ed., U.S. Naval Strategy in the 1990s: Selected Documents, Newport Paper 27 (Newport, R.I.: Naval War College Press, 2006) [hereafter Newport Paper 27], pp. 87–88 and notes, available at www.usnwc.edu/press/newportpapers/documents/NP27.pdf.
- 3. Samuel P. Huntington, "National Policy and the Transoceanic Navy," U.S. Naval Institute *Proceedings* 80, no. 5 (May 1954), p. 483.
- 4. U.S. Navy Dept., "... From the Sea," p. 1.
- 5. See Newport Paper 27.
- See Newport Paper 27, pp. 159–60 and notes.
 The quote appears on page 12 as originally issued.
- 7. So named for Title X of the U.S. Code, which establishes the legal basis for the roles and

- missions of the services. See "President's Forum," *Naval War College Review* 61, no. 3 (Summer 2008), pp. 7–11.
- Strategic Forecasting Geopolitical Diary: U.S.
 Aid to Georgia Raises a Question for Russia, 25
 August 2008, Stratfor.com, www.stratfor.com/geopolitical_diary.
- 9. Margaret Thatcher, *The Downing Street Years* (New York: HarperCollins, 1993), p. 174. Thatcher clearly understands the logic of this when she says, concerning British decision making prior to the Argentine invasion of the Falklands, "Most important perhaps is that nothing would have more reliably precipitated a full scale invasion, if something less had been planned, than if we had started military preparations on the scale required to send an effective deterrent."
- Lawrence Freedman and Virginia Gamba-Stonehouse, Signals of War (Princeton, N.J.: Princeton Univ. Press, 1991), pp. 65–78.
- For Chinese doctrine, Peng Guangqian and Yao Youzhi, eds., *The Science of Military* Strategy (Beijing: Military Publishing House, 2005), pp. 415–17.

